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## 10/046,639 **Application Number** October 26, 2001 **Filing Date** Li, Bin **First Named Inventor OPTIMAL BIT ALLOCATION** SYSTEM FOR REED-SOLOMON Title **CODED DATA** 2819 **Group Art Unit** Unassigned **Examiner Name** 20510-002000US **Attorney Docket Number**

| I hereby appoint:  |                     |                  |                     |          |        |                                   |   |  |  |
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| <b> </b>   | Kenneth R. Allen    |                  |                     | $\dashv$ | 27,    | :                                 |   |  |  |
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| F  | Charles L. Hamilton |                  |                     |          | 42,624 |                                   |   |  |  |
| ŀ  |                     | Richard T. Ogawa |                     |          | 37,    |                                   |   |  |  |
| as my/our attorney(s) or agent(s) to prosecute the application identified above, and to transact all business in the United States Patent and Trademark Office connected therewith.                    |                     |                  |                     |          |        |                                   |   |  |  |
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| I am the:  Applicant/Inventor.  Assignee of record of the entire interest. See 37 CFR 3.71.  Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96).   |                     |                  |                     |          |        |                                   |   |  |  |
| SIGNATURE of Applicant or Assignee of Record   |                     |                  |                     |          |        |                                   |   |  |  |
| Name   | An                  | dy Wciri         | ich a               |          |        |                                   |   |  |  |
| Signature  |                     |                  |                     |          |        |                                   |   |  |  |
| Date   | Date 26 Mar 2002    |                  |                     |          |        |                                   |   |  |  |
| NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*. |                     |                  |                     |          |        |                                   |   |  |  |
|  |                     | re submitted.    | s.ga.a.o io roquite |          |        |                                   |   |  |  |

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STATEMENT UNDER 37 CFR 3.73(b) Applicant/Patent Owner: Catena Networks, Inc. pplication No./Patent No.: 10/046,639 Filed/Issue Date:October 26, 2001 Entitled: OPTIMAL BIT ALLOCATION SYSTEM FOR REED-SOLOMON CODED DATA Catena Networks, Inc. a corporation (Name of Assignee) (Type of Assignee, e.g., corporation, partnership, university, government agency, etc.) states that it is: the assignee of the entire right, title, and interest; or an assignee of an undivided part interest in the patent application/patent identified above by virtue of either: A. X An assignment from the inventor(s) of the patent application/patent identified above. The assignment was recorded in the Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_, or for which a copy thereof is attached. OR B. A chain of title from the inventor(s), of the patent application/patent identified above, to the current assignee as shown below: 1. From: , To: The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached. 2. From: The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached. 3. From: The document was recorded in the United States Patent and Trademark Office at Reel \_\_\_\_\_, Frame \_\_\_\_\_, or for which a copy thereof is attached. Additional documents in the chain of title are listed on a supplemental sheet. Copies of assignments or other documents in the chain of title are attached. [NOTE: A separate copy (i.e., the original assignment document or a true copy of the original document) must be submitted to Assignment Division in accordance with 37 CFR Part 3, if the assignment is to be recorded in the records of the USPTO. See MPEP 302.8] The undersigned (whose title is supplied below) is empowered to sign this statement on behalf of the assignee. Signature Andreas Weirich Typed or printed name Vice President of Systems Architecture Title

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Attorney bocket No.: 20510-20.00US

## PATENT ASSIGNMENT

Catena Networks Canada, Inc. (a Canadian corporation), ("Assignor") a wholly owned subsidiary of Catena Networks, Inc. (a Delaware corporation), is the record owner of:

**Priority:** 

Canadian Patent Application No. 2,324,574

Corresponding to

U.S. Patent Application No.: PCT Application No.

10/046, 639 Filed: October 26, 2001 01/50943 Filed: October 26, 2001

WHEREAS, Catena Networks, Inc., (a Delaware corporation), ("Assignee"), located at 303 Twin Dolphin Drive, Suite 600, Redwood Shores, California 94065 wishes to purchase all Assignor's right, title and interest to and under the patent application.

Therefore, for good and valuable consideration, receipt of which is hereby acknowledged by Assignor, Assignor has assigned, and by these presents does assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on any patent application claiming priority from the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignor had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

| Date: 20 Har 2002 | H. Wenil        |
|-------------------|-----------------|
|                   | Andreas Weirich |

Vice President Systems Architecture

| PROVINCE OF Outons | ) |     |   |     |
|--------------------|---|-----|---|-----|
| COUNTY OF          | ) | SS. |   |     |
| ¬ 0 - /            |   | 1   | 4 | , , |

On Mary Public, personally appeared Andreas Weirich, personally known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged to me that he executed the same in his authorized capacity, and that by his signature on the instrument the person, or the entity upon behalf of which the person acted, executed the instrument.

WITNESS my hand and official seal.

**NOTARY PUBLIC** 

My Commission Expires:

PA 3204558 v1

Attorney Docket No.: 020510-002000US Client Reference No.: FMD-28/38

## ASSIGNMENT OF PATENT APPLICATION

JOINT

WHEREAS, Bin Li of 1316 Carling Avenue, Apt. 1908, Ottawa, K1Z 7L1, Canada; Alberto Ginesi of 111 Covington Place, Nepean, ONC K2G 6B6, Canada; Song Zhang of 32 Sherk Crescent, Kanata, K2K 2L3, Canada; hereinafter referred to as "Assignors," are the inventors of the invention described and set forth in the below-identified application for United States Letters Patent:

Title of Invention:

OPTIMAL BIT ALLOCATION SYSTEM FOR REED-

SOLOMON CODED DATA

Date(s) of execution of Declaration:

Filing Date:

October 26, 2001

Application No.:

10/046,639; and

WHEREAS, Catena Networks, Inc., a corporation of the state of Delaware, located at 307 Legget Drive, Kanata, Ontario, CANADA K2k 3C8hereinafter referred to as "ASSIGNEE," is desirous of acquiring an interest in the invention and application and in any U.S. Letters Patent and Registrations which may be granted on the same:

For good and valuable consideration, receipt of which is hereby acknowledged by Assignors, Assignors have assigned, and by these presents do assign to Assignee all right, title and interest in and to the invention and application and to all foreign counterparts (including patent, utility model and industrial designs), and in and to any Letters Patent and Registrations which may hereafter be granted on the same in the United States and all countries throughout the world, and to claim the priority from the application as provided by the Paris Convention. The right, title and interest is to be held and enjoyed by Assignee and Assignee's successors and assigns as fully and exclusively as it would have been held and enjoyed by Assignors had this Assignment not been made, for the full term of any Letters Patent and Registrations which may be granted thereon, or of any division, renewal, continuation in whole or in part, substitution, conversion, reissue, prolongation or extension thereof.

Assignors further agree that they will, without charge to Assignee, but at Assignee's expense, (a) cooperate with Assignee in the prosecution of U.S. Patent applications and foreign counterparts on the invention and any improvements, (b) execute, verify, acknowledge and deliver all such further papers, including patent applications and instruments of transfer, and (c) perform such other acts as Assignee lawfully may request to obtain or maintain Letters Patent and Registrations for the invention and improvements in any and all countries, and to vest title thereto in Assignee, or Assignee's successors and assigns.

Assignors hereby authorize and request Townsend and Townsend and Crew LLP, Two Embarcadero Center, 8<sup>th</sup> Floor, San Francisco, CA 94111-3834, to insert herein above the application number and filing date of said application when known.

IN TESTIMONY WHEREOF, Assignors have signed their names on the dates indicated.

Dated: March 13, 2002

Bin Li

Assignment Attorney Docket No.: 020510-002000US

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Dated: MARCH 15, 2502

Dated: March 36,2002